

REMARKS

Claims 3-28 are active in the present application.

At the outset, Applicants would like to thank Examiner Reddick for the helpful and courteous discussion with their Representative on October 8, 2003. During this discussion the amendment set forth herein was discussed as it applies to the art of record. The content of this discussion is believed to be accurately reflected in the comments that follow.

At present, the primary sterilization process for medical instruments employs an ethylene oxide gas. However, due to problems resulting from residual gas, in recent years a method of sterilization with radiations ( $\gamma$ -rays, electron rays) came into favor. Radiation sterilization also encounters several problems, most prominent of which is a reduction in the adhesion properties of adhesive products comprising an acrylic adhesive after irradiation compared to the adhesion properties. This undesirable result gives rise to adhesion of adhesive tapes, adhesive plasters or surgical drapes comprising an acrylic adhesive becoming lower than predetermined adhesion, or adhesive labels stuck on medical instruments being easily released. (page 1, lines 11-20).

The present invention solves the problems associated with sterilization of medical instruments and adhesives by providing a radiation-resistant medical adhesive product comprising an acrylic polymer and a radiation-resistant agent selected from the group consisting of rosin, rosin derivatives, terpene resin, terpene phenol resin, aromatic modified terpene resin, hydrogenated terpene resin, aliphatic petroleum resin, aromatic petroleum resin, copolymerized petroleum resin, alicyclic petroleum resin, hydrogenated petroleum resin and alkyl phenol resin (Claim 3).

Accordingly, the presently examined invention provides a method for sterilizing the radiation-resistant medical adhesive product described above by sterilizing the radiation-resistant medical adhesive product by irradiation with either  $\gamma$ -rays or electron rays (see Claim 8).

The rejections of Claim 8 under 35 U.S.C. §102(b), and in the alternative under 35 U.S.C. §103(a), over Traynor et al (US 4,726,982) are obviated by amendment.

Traynor et al disclose a pressure-sensitive adhesive that has high cohesive strength and adheres permanently to high-solids automotive paint systems preferably comprises a mixture of (1) a crosslinked acrylic copolymer of acrylic acid ester and N-vinyl-2-pyrrolidone, and (2) certain tackifier resins (see the Abstract). Traynor et al further disclose that the useful tackifier resins are poly(isobornylmethacrylate), pentaerythritol ester of rosin, and mixed-aliphatic/aromatic polymeric tackifier resins (see column 3, lines 10-15).

At column 8, lines 23-25, Traynor et al state: "The dried tackified pressure-sensitive adhesive coating was irradiated with an exposure of  $360 \text{ mJ/cm}^2$  ("Dynachem"<sup>TM</sup> Radiometer Model 500) from a bank of lamps, 90% of the emissions of which were between 300 and 400 nm with a maximum at 351 nm. By doing so, the tackified pressure-sensitive adhesive layer of this example became crosslinked, as evidenced by 70% gel in THF." From this disclosure, it is clear that the purpose of irradiation in Traynor et al is to crosslink the adhesive layer, not to sterilize the adhesive layer as in the present invention.

Moreover, Applicants note that the wavelength employed by Traynor et al (between 300 and 400 nm) are in the ultraviolet region. For purposes of sterilization of medical products, the radiation employed is generally  $\gamma$ -rays or electron rays (see page 1, lines 5-20). In order to clarify this distinction between the present invention and the disclosure of Traynor

et al, Claim 8 has been amended to specify the source of irradiation as being either  $\gamma$ -rays or electron rays. Traynor et al is silent with respect to either of these irradiation sources.

The standard for determining anticipation requires that the reference “must teach every element of the claim” (MPEP §2131). Therefore, the absence of any disclosure or suggestion in any of the art of record of the source of irradiation as being either  $\gamma$ -rays or electron rays would necessarily make these references fail to anticipate the present invention.

Moreover, Applicants submit that based on the lack of a disclosure or suggestion in Traynor et al of the specifically claimed irradiation sources this reference would fail to support even a *prima facie* case of obviousness. As MPEP §2143.03 states: “To establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” Accordingly, Applicants submit that Traynor et al fail to meet this requirement, and as such the artisan would have no reasonable motivation to perform the claimed method or any reasonable expectation of the advantageous obtained thereby.

In view of the foregoing, Applicants request withdrawal of the rejections over Traynor et al.

The objection to Claim 8 as being dependent on a non-elected claim (Claim 3) is obviated by amendment. Withdrawal of this ground of objection is respectfully requested.

Applicants submit that the present application is now in condition for allowance.

Early notification of such action is earnestly solicited.

Respectfully submitted,

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